The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

Peter S. Dardi, Ph.D.
Registration No. 39,650

Customer No. 24113
Patterson, Thuente, Skaar & Christensen, P.A.
4800 IDS Center
80 South 8th Street
Minneapolis, Minnesota 55402-2100
Telephone: (612) 349-5746

Please grant any extension of time necessary for entry; charge any fee due to Deposit Account No. 16-0631.

CERTIFICATE OF EXPRESS MAIL

"Express Mail" mailing label number EV 011654145 US. Date of Deposit: February 15, 2002. I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Jeanne Truman
Name of Person Making Deposit — Signature

ATTACHMENT
MARKED-UP AMENDMENT

Title As Amended

Please substitute the following amended title for the title as currently on record.

TITANIUM OXIDE NANOPARTICLES

Specification As Amended

After the title, the following has been added:

--CROSS REFERENCE TO RELATED APPLICATIONS

This application is a continuation of copending and commonly assigned U.S. Patent Application Serial Number 09/123,255 to Bi et al., entitled "Metal (Silicon) Oxide/Carbon Composite Particles," incorporated herein by reference.--

At page 15, lines 11-20, the paragraph has been amended as follows:

An alternative design of a laser pyrolysis apparatus has been described. See, copending and commonly assigned U.S. Patent Application No. 08/808,850, now U.S. Patent 5,958,348, entitled "Efficient Production of Particles by Chemical Reaction," incorporated herein by reference. This alternative design is intended to facilitate production of commercial quantities of particles by laser pyrolysis. A variety of configurations are described for injecting the reactant materials into the reaction chamber.

At page 18, lines 1-17, the paragraph has been amended as follows:

Because of their small size, the primary particles tend to form loose agglomerates due to van der Waals and other electromagnetic forces between nearby particles. Nevertheless, the nanometer scale of the primary particles is clearly observable in transmission electron micrographs of the particles. The particles generally have a surface area corresponding to particles on a nanometer scale as observed in the micrographs. Furthermore, the particles can manifest unique properties due to their small size and large surface area per weight of material. For example, TiO_2 nanoparticles generally exhibit altered electromagnetic absorption properties based on their small size, as described in copending and commonly assigned U.S. Patent Application Serial No. 08/962,515, now U.S. Patent 6,099,798, entitled "Ultraviolet Light Block and Photocatalytic Materials," incorporated herein by reference.

At page 21, lines 17-31, the paragraph has been amended as follows:

As noted above, the titanium oxide/carbon composite particles and the silicon oxide/carbon composite particles can be used advantageously in the production of abrasives for surface polishing. Similarly, other metal oxide/carbon composite nanoparticles also can be used in the production of abrasives. The use of nanoscale metal oxide particles in the production of improved abrasives is described in copending and commonly assigned patent application 08/961,735, now U.S. Patent 6,290,735 to Kambe et al., entitled "Abrasive Particles for Surface Polishing," incorporated herein by reference and in copending and commonly assigned patent application 09/085,514 to Kumar et al., entitled "Silicon Oxide Particles," incorporated herein by reference.

<u>Claims As Amended</u>

Claims 1-17 have been canceled without prejudice or disclaimer.